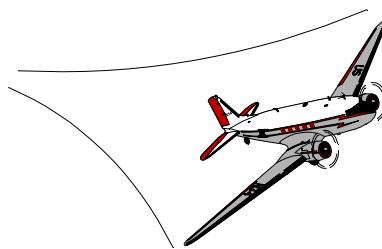


SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation

**Federal Aviation
Administration**

No. CE-03-35
April 16, 2003

We post SAIBs on the internet at "av-info.faa.gov"

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, an owner or operator, of the following **Piper PA-31** models, of potential failure of elevator bungee spring P/N 71056-2 or P/N 71056-3. The failure of the elevator bungee spring may result in loss of elevator down spring tension, which will cause a variation in longitudinal control input force requirements.

Model	Serial Numbers
PA-31, PA-31-300, and PA-31-325	31-2 through 31-8312019
PA-31-350	31-5001 through 31-8553002
PA-31P	31P-1 through 31P-7730012

Background

The FAA has received several reports of premature failures of elevator bungee spring P/N 71056-2 or P/N 71056-3. Note that this spring is the subject of Airworthiness Directive AD 98-08-18, and it is to be repetitively replaced at 1000 Hrs. time-in-service interval.

Some of the reports indicated that failures occurred in flight. Evaluation of one failed spring showed that failure was due to a torsional fatigue crack that initiated at the inside position of an active coil.

Recommendation

After reviewing available data, **we recommend that you have a heightened awareness of elevator bungee spring failure.** The failure of the elevator bungee spring can be recognized by the loss of elevator down spring tension, and is best noted during controls check accomplished as part of the Before Starting Engines check.

If you suspect or note spring failure, you should take the appropriate maintenance action to inspect, remove, replace, and adjust the elevator control system. In an event of spring failure, we request that you notify the FAA at the address listed below. Include as much information as possible, including model number, serial number, part number, part's time-in-service, and physical description of the failure. We also request that you retain the failed spring for further review.

Note: Based on current information we, the FAA, only recommend these actions. We will continue this investigation and analyze any added information. We may require additional actions, such as the issuance of an Airworthiness Directive based on this analysis.

For Further Information Contact

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